# RFQ Injector Installation Updates (29 Aug – 05 Sep 2012)

C.Y. Tan 05 Sep 2012

|                     | Sunday       | Monday   | Tuesday                    | Wednesday                   | w/hide Booster s Thursday | Friday                          | Saturday     |  |  |
|---------------------|--------------|--|----------------------------|-----------------------------|---------------------------|---------------------------------|--------------|--|--|
| RFQ                 |              | 10111  | ore mail                   | <u></u>                     | acconciliore 1 out        |                                 |              |  |  |
| wk 19               | Sep 2        | 3  | 4                          | 5                           | 6                         | 7                               | 8            |  |  |
| RFQ                 |              |  | install platform and steps |                             |                           |                                 |              |  |  |
|                     |              |  |                            |                             |                           | disassemble                     |              |  |  |
|                     |              | 10   |                            |                             |                           | LEBT                            |              |  |  |
| wk 20<br><b>RFQ</b> | Sep 9        | 10   | 11                         | 12                          | 13                        | 14                              | 15           |  |  |
|                     |              | disassemble disconnect power/water in 750 disconnect power/water power/water power/water power/water power/water power/water p |                            |                             |                           |                                 |              |  |  |
|                     |              | LEBT   |                            | ne                          | remove H-                 | cables in tray                  |              |  |  |
| wk 21               | Sep 16       | 17   | 18                         | 19                          | 20                        | 21                              | 22           |  |  |
| RFQ                 |              |  |                            | and stone                   |                           | cut door in                     |              |  |  |
|                     |              | install platform and steps concrete  |                            |                             |                           |                                 |              |  |  |
|                     |              | remove hoses etc from wall by  |                            |                             | ne components             |                                 |              |  |  |
|                     |              | H- line clean out H- and I- supplies from racks  |                            |                             |                           |                                 |              |  |  |
| 1 00                |              |  |                            |                             |                           |                                 | 20           |  |  |
| wk 22<br>RFQ        | Sep 23       | 24   | 25                         | 26                          | 27                        | 28                              | 29           |  |  |
|                     |              | install platform and steps  put power supplies in  |                            |                             |                           |                                 |              |  |  |
|                     |              | remove 750 line magnets and stands   |                            |                             |                           |                                 |              |  |  |
| wk 23               | Sep 30       | Oct 1  | 2                          | 3                           | 4                         | 5                               | 6            |  |  |
| RFQ                 | 3ep 30       | Oct 1  |                            | rce racks/contro            | 1 -                       |                                 |              |  |  |
|                     |              |  | install safety system      |                             |                           |                                 |              |  |  |
|                     |              | pull cables  |                            |                             | electronics/cabling       |                                 |              |  |  |
|                     |              | remove orange steel ins  |                            |                             | install sup               | oort I beams                    |              |  |  |
| wk 24               | Oct 7        | 8  |                            | 10                          | 11                        | 12                              | 13           |  |  |
| RFQ                 |              |  | install LEBT               |                             | put rougher in            | install RFQ                     |              |  |  |
| wk 25<br>RFQ        | Oct 14       | 15   | 16                         | 17                          | 18                        | 19                              | 20           |  |  |
|                     |              | ion source   | connect vacuum             | connect high<br>power RF to | connect power             | connect water<br>to RFQ,        |              |  |  |
|                     |              | startup  | controls                   | RFQ                         | to solenoids              | solenoids                       |              |  |  |
| wk 26               | Oct 21       | 22   | 23                         | 24                          | 25                        | 26                              | 27           |  |  |
| RFQ                 |              |  |                            | ro.                         | pumpdown,                 | condition RFQ                   | hoom tosts   |  |  |
|                     |              | <u> </u>   | ulign LEBT and Ri          | <u>ro</u>                   | leak check                | and get arc                     | beam tests   |  |  |
| wk 27               | Oct 28       | 29   | 30                         | 31                          | Nov 1                     | 2                               | 3            |  |  |
| RFQ                 | beam tests   | install ME   | EBT, connect MEI           | BT to tank 1                |                           | connect water                   |              |  |  |
|                     |              |  |                            |                             |                           | to quads                        |              |  |  |
|                     |              |  |                            |                             |                           | connect vac<br>ctrl, high power |              |  |  |
|                     |              |  | align MEBT                 |                             |                           | RF, power to                    |              |  |  |
|                     |              |  |                            |                             |                           | quads                           |              |  |  |
| wk 28<br>RFQ        | Nov 4        | 5  | 6                          | 7                           | 8                         | 9                               | 10           |  |  |
|                     |              | pumpdown, leak check   |                            |                             | condition buncher         |                                 |              |  |  |
|                     |              | controls testing   |                            |                             |                           |                                 |              |  |  |
|                     |              |  | interlocks                 |                             |                           |                                 |              |  |  |
| rule 20             | Nov 11       | 12   | testing<br>13              | 14                          | 15                        | 16                              | 17           |  |  |
| wk 29<br>RFQ        | 140V 11      | power testing  | 13                         | 1                           | test to end of ta         |                                 | 1/           |  |  |
| wk 30               | Nov 18       | 19   | 20                         | 21                          | 22                        | 23                              | 24           |  |  |
| RFO                 | 101 10       |  |                            | studies / commi             |                           | <del></del>                     | <del>-</del> |  |  |
| wk 31               | Nov 25       | 26   | 27                         | 28                          | 29                        | 30                              | Dec 1        |  |  |
|                     | h vacuum/rig |  | mech water                 |                             | gnment                    | rad safety                      |              |  |  |
|                     | support      |  | electricians               |                             | SS/contract               | building i                      |              |  |  |
| EE s                | support      |  |                            |                             |                           |                                 |              |  |  |

IR

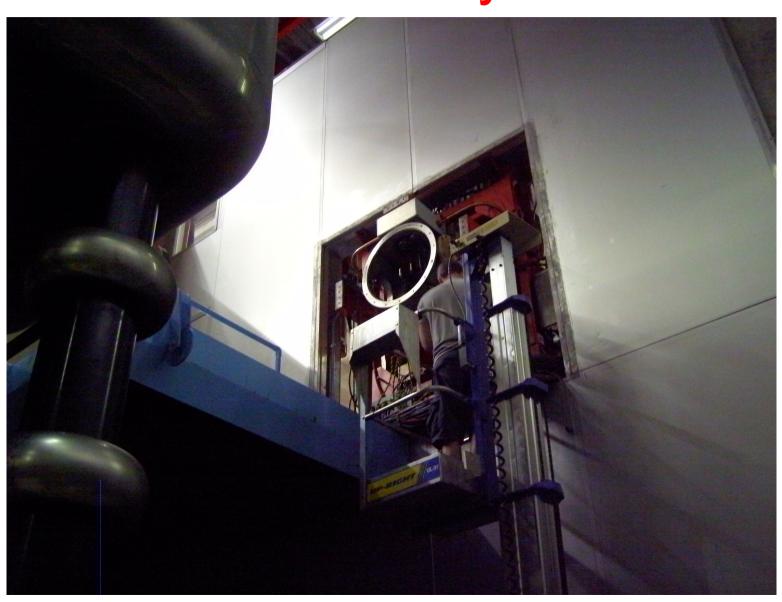
Wall panel removed for door cutting



### RFQ PA disassembled



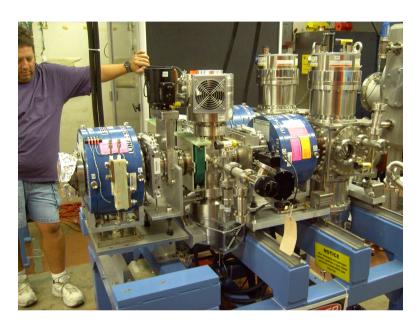
# Tying up cables before platform assembly

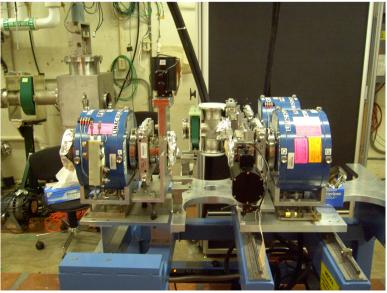


## LEBT stand disassembly

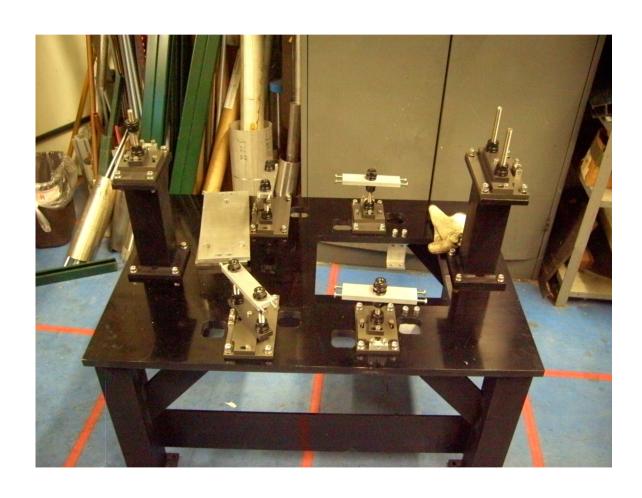








### MEBT stand partially assembled



There are missing parts that are necessary for mounting the quadrupoles and the buncher.

#### **Plans**

- Construction of platform starts.
- Test area preparation for LEBT move
  - Power and vacuum cables removed from test line (done).
  - Cubes removed from test line (done)
  - Solenoids (left on)
  - Disassemble source HV cabinet